

CLAIMS

1. A method to provide a high pressure press comprising a cylindrical pressure chamber (2) and a replaceable wear liner (1), **characterised** by the steps of
- 5 -inserting said wear liner (1) into said cylindrical pressure chamber (2)
- fixing said wear liner (1) in place with expansion by inner pressure above the yield point, such that said wear liner (1) is thereby arranged in a state of residual
- 10 compressive stress by the increase in diameter of said wear liner (1).
2. A method according to claim 1, **characterised** by closing the press and applying an inner fluid pressure to
- 15 said wear liner (1) inside the press, so as to provide said residual compressive stress.
3. A method according to claim 2, **characterised** by said inner fluid being supplied by an external pressure source
- 20 connected to the press.
4. A method according to any one of claims 1-3, **characterised** in that said wear liner (1) is plastically deformed, so as to provide said residual compressive
- 25 stress.
5. A method according to any one of claims 1-4, **characterised** in that the method further comprises the step of removing an existing wear liner (1) which
- 30 replacement includes the steps of
- making one or more cuts in the inner surface of the existing said wear liner (1) with the intention of causing the existing said wear liner (1) to collapse under the residual compressive stress,

removing the collapsed existing said wear liner (1).

6. A method according to claim 5, **characterised** in that the one or more cuts (10) which are made in the inner surface of the existing said wear liner (1) are approximately square in cross section.

7. A high pressure press comprising a cylindrical pressure chamber (2) and a replaceable wear liner (1) arranged inside the cylindrical pressure chamber (2) in a state of residual compressive stress, **characterised** in that the exterior surface of said wear liner (1) is in direct contact with the interior surface of said cylindrical pressure chamber (2).

8. A high pressure press according to claim 7, **characterised** in that the wear liner (1) is shaped as a thin walled, circular cylinder.

9. A high pressure press according to any one of claims 7-8, **characterised** in that the wear liner (1) is plastically deformed, as a result of an expansion of the wear liner after its insertion into the pressure chamber (2), so that a residual compressive stress is provided.

10. The use of a high pressure press according to any one of claims 7-9 for the treatment of substances.

11. The use of a high pressure press according to any one of claims 7-9 for the isostatic pressing of powder pre-form products.

12. The use of a high pressure press according to any one of claims 7-9 for the isostatic pressing of castings.